USB 2.0 Ethernet Adapter

# User's Manual

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# Safety Instructions

Always read the safety instructions carefully

- Keep this User's Manual for future reference
- Keep this equipment away from humidity
- Lay this equipment on a reliable flat surface before setting it up
- If any of the following situation arises, get the equipment checked by a service technician:
  - The equipment has been exposed to moisture.
  - The equipment has been dropped and damaged.
  - The equipment has obvious sign of breakage.
  - The equipment has not been working well or you cannot get it work according to User's Manual.

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# 1. Introduction

The USB 2.0 to Fast Ethernet Adapter is a high performance and highly integrated USB2.0 bus Ethernet Controller with embedded 7K*16 bit SRAM. The adapter supports both 10 Mbps and 100 Mbps Ethernet function based on IEEE802.3/IEEE802.3u LAN standard.

## Features

- Compliant with USB 2.0 and USB 1.1
- Compatible with IEEE 802.3u 100 BASE-T, TX, and T4
- Single chip USB to 10/100 Mbps Fast Ethernet Controller
- Supports BOTH bus or self-powered mode
- Embedded 7K*16 bit SRAM, 256*16 bit SRAM and 8 FIFO
- Supports both full-duplex and half-duplex operations
- Provides a MII port for both Ethernet and PHY interface
- Supports suspended mode and remote wake-up (link-up or magic packet)
- PHY power down mode for power saving
- External PHY loop-back diagnostic capability

## Package Contents

Before installation, please check the items of the package. The package should contain the following items:

- USB2.0 Ethernet Adapter x1
- Driver CD x1
- Quick Installation Guide x1

## System Requirements

- IBM compatible Pentium-233MHZ or faster
- 64 MB RAM or more
- One available USB port
- Windows® 98SE/ ME / 2000 / XP; Mac OS X 10.x

# LED Status

| LED | Color | Description |
|---|---|---|
| Power | Green | On for 100Mbps.<br>Off of 10Mbps or not connected. |
| Link | Green | LAN activity. Blinking when there is data flow between LAN and the host computer. |

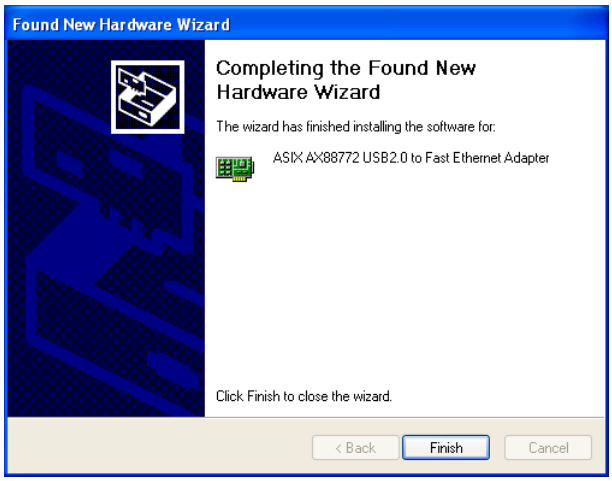
# 2. Installation

## Windows XP

1. Connect the Ethernet adapter's USB end to a free USB port of your computer.
2. Upon your USB device connection, Windows will detect the new device and pop up the following screen. Insert the provided CD into your CD-ROM drive. Then select **Install the software automatically (Recommended)** and click **Next**.

Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install software for:
AX88772
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel

3. When the following screen appears, click **Finish**.


Found New Hardware Wizard
Completing the Found New Hardware Wizard
The wizard has finished installing the software for:
ASIX AX88772 USB2.0 to Fast Ethernet Adapter
Click Finish to close the wizard.
< Back
Finish
Cancel

# Windows 2000

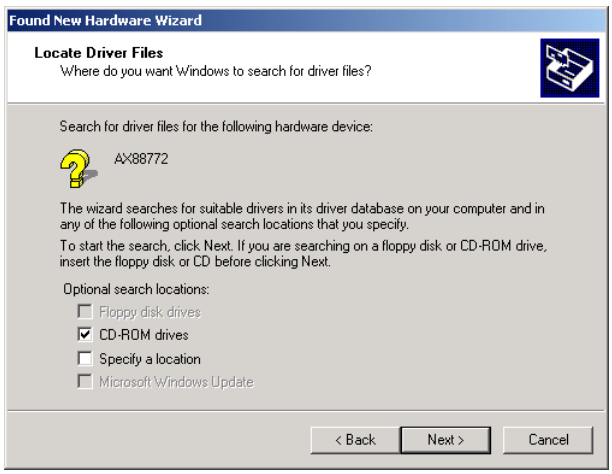
1. Connect the Ethernet adapter's USB end to a free USB port of your computer.
2. Upon your USB device connection, Windows will detect the new device and pop up the following screen. Insert the provided CD into your CD-ROM drive. Then click **Next**.

Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install a device driver for a hardware device.
To continue, click Next.
< Back
Next >
Cancel

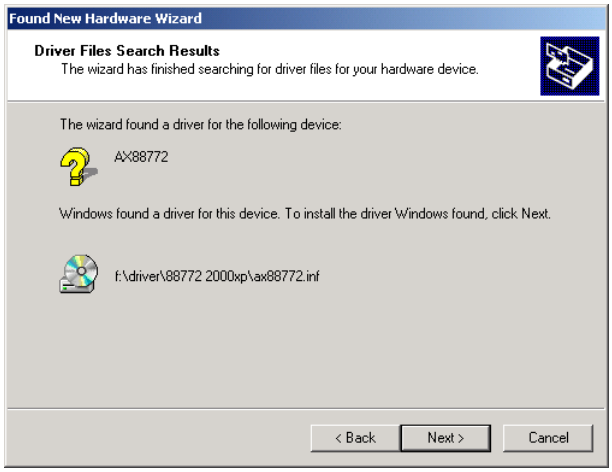
3. Select **Search for a suitable driver for my device** and click **Next**.

Found New Hardware Wizard
Install Hardware Device Drivers
A device driver is a software program that enables a hardware device to work with an operating system.
This wizard will complete the installation for this device:
AX88772
A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next.
What do you want the wizard to do?
Search for a suitable driver for my device (recommended)
Display a list of the known drivers for this device so that I can choose a specific driver
< Back
Next >
Cancel

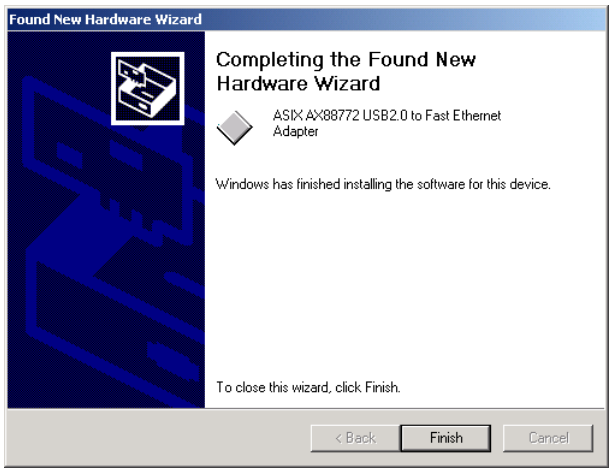
4. Select the **CD-ROM drives** option and click **Next**.


Found New Hardware Wizard
Locate Driver Files
Where do you want Windows to search for driver files?
Search for driver files for the following hardware device:
AX88772
The wizard searches for suitable drivers in its driver database on your computer and in any of the following optional search locations that you specify.
To start the search, click Next. If you are searching on a floppy disk or CD-ROM drive, insert the floppy disk or CD before clicking Next.
Optional search locations:
Floppy disk drives
CD-ROM drives
Specify a location
Microsoft Windows Update
< Back
Next >
Cancel

5. When Windows found the driver, click **Next**.


Found New Hardware Wizard
Driver Files Search Results
The wizard has finished searching for driver files for your hardware device.
The wizard found a driver for the following device:
AX88772
Windows found a driver for this device. To install the driver Windows found, click Next.
f:\driver\88772 2000xp\ax88772.inf
< Back
Next >
Cancel

6. Click **Finish**.

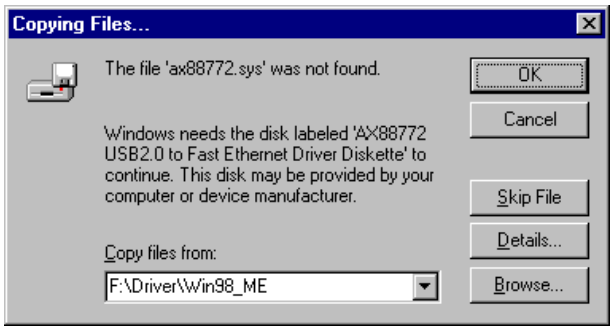

Found New Hardware Wizard
Completing the Found New Hardware Wizard
ASIX AX88772 USB2.0 to Fast Ethernet Adapter
Windows has finished installing the software for this device.
To close this wizard, click Finish.
< Back
Finish
Cancel

# Windows ME

1. Connect the Ethernet adapter's USB end to a free USB port of your computer.
2. Upon your USB device connection, Windows will detect the new device and pop up the following screen. Insert the provided CD into your CD-ROM drive. Select **Automatic search for a better driver** and then click **Next**.

Add New Hardware Wizard
Windows has found the following new hardware:
AX88772
Windows can automatically search for and install software that supports your hardware. If your hardware came with installation media, insert it now and click Next.
What would you like to do?
Automatic search for a better driver (Recommended)
Specify the location of the driver (Advanced)
< Back
Next >
Cancel

3. When the screen below appears, click **Browse** to navigate to ***x*:\Driver\Win98_ME** where x: is your CD-ROM drive letter.


Copying Files...
The file 'ax88772.sys' was not found.
OK
Cancel
Windows needs the disk labeled 'AX88772 USB2.0 to Fast Ethernet Driver Diskette' to continue. This disk may be provided by your computer or device manufacturer.
Skip File
Details...
Copy files from:
F:\Driver\Win98_ME
Browse...

4. Click **Finish**.

5. When prompted, click **Yes** to restart your computer.

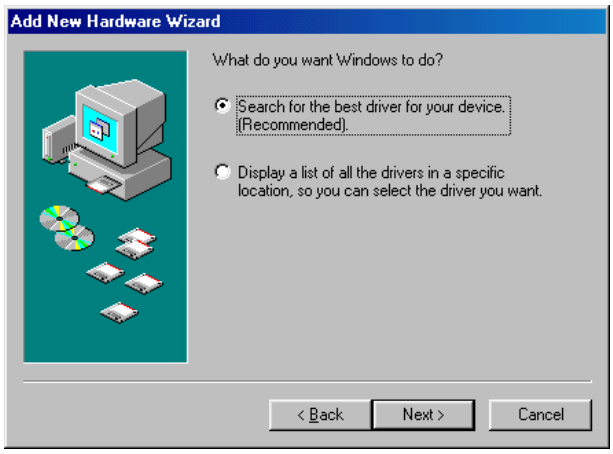
System Settings Change
To finish setting up your new hardware, you must restart your computer.
Do you want to restart your computer now?
Yes
No

# Windows 98SE

1. Connect the Ethernet adapter's USB end to a free USB port of your computer.
2. Upon your USB device connection, Windows will detect the new device and pop up the following screen. Insert the provided CD into your CD-ROM drive. Then click **Next**.

Add New Hardware Wizard
This wizard searches for new drivers for:
AX88772
A device driver is a software program that makes a hardware device work.
< Back
Next >
Cancel

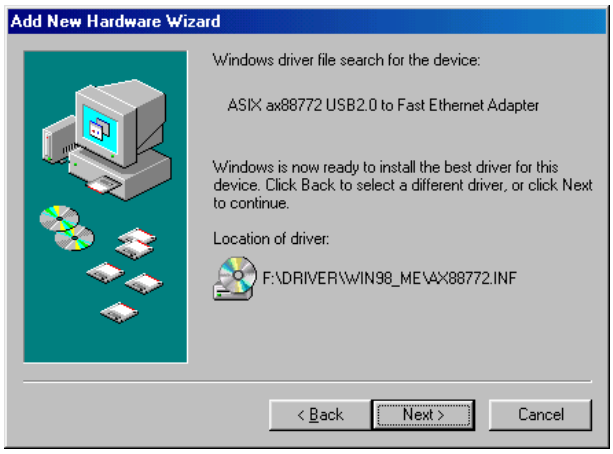
3. Select **Search for the best driver for your device**. Click **Next**.


Add New Hardware Wizard
What do you want Windows to do?
Search for the best driver for your device. (Recommended).
Display a list of all the drivers in a specific location, so you can select the driver you want.
< Back
Next >
Cancel

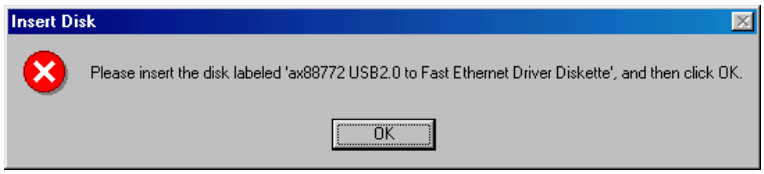
4. Select **Specify a location** and click **Browse** to navigate to ***x*:\Driver\Win98_ME** where x: is your CD-ROM drive letter. Then click **Next**.

Add New Hardware Wizard
Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.
Floppy disk drives
CD-ROM drive
Microsoft Windows Update
Specify a location:
F:\Driver\Win98_ME
Browse...
< Back
Next >
Cancel

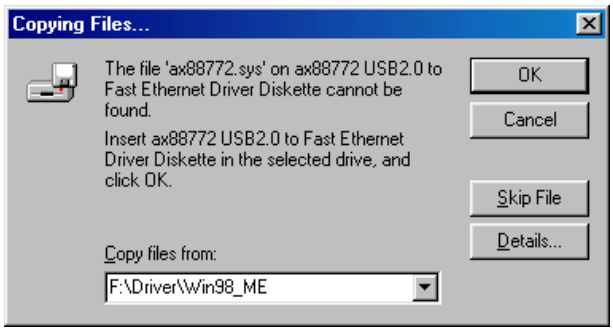
5. Click **Next**.


Add New Hardware Wizard
Windows driver file search for the device:
ASIX ax88772 USB2.0 to Fast Ethernet Adapter
Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
Location of driver:
F:\DRIVER\WIN98_ME\AX88772.INF
< Back
Next >
Cancel

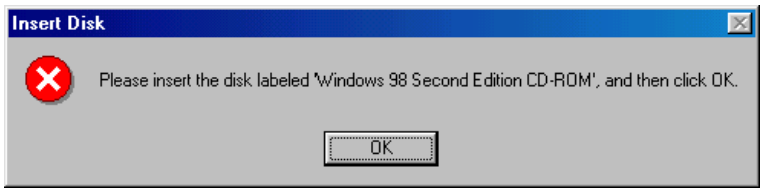
6. If the screen below appears, click **OK**.

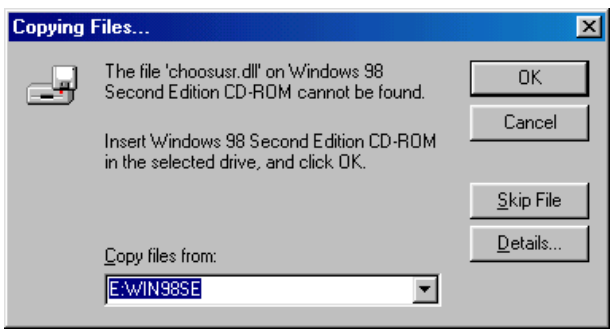



In the drop-down list, select ***x*:\Driver\Win98_ME** and click **OK**.

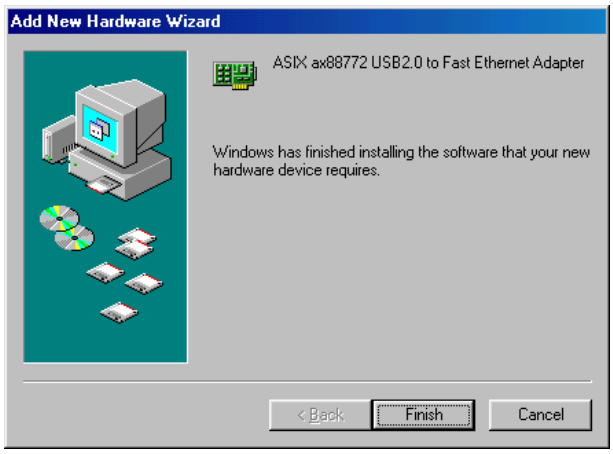

Copying Files...
The file 'ax88772.sys' on ax88772 USB2.0 to Fast Ethernet Driver Diskette cannot be found.
Insert ax88772 USB2.0 to Fast Ethernet Driver Diskette in the selected drive, and click OK.
Copy files from:
F:\Driver\Win98_ME
OK
Cancel
Skip File
Details...

7. If the system prompts you for the Windows 98SE CD-ROM, click **OK**. Remove the provided CD and insert the Windows 98SE CD-ROM. Then click **OK** again.





Copying Files...
The file 'choosusr.dll' on Windows 98 Second Edition CD-ROM cannot be found.
Insert Windows 98 Second Edition CD-ROM in the selected drive, and click OK.
Copy files from:
E:\WIN98SE
OK
Cancel
Skip File
Details...

8. Click **Finish**.


Add New Hardware Wizard
ASIX ax88772 USB2.0 to Fast Ethernet Adapter
Windows has finished installing the software that your new hardware device requires.
< Back
Finish
Cancel

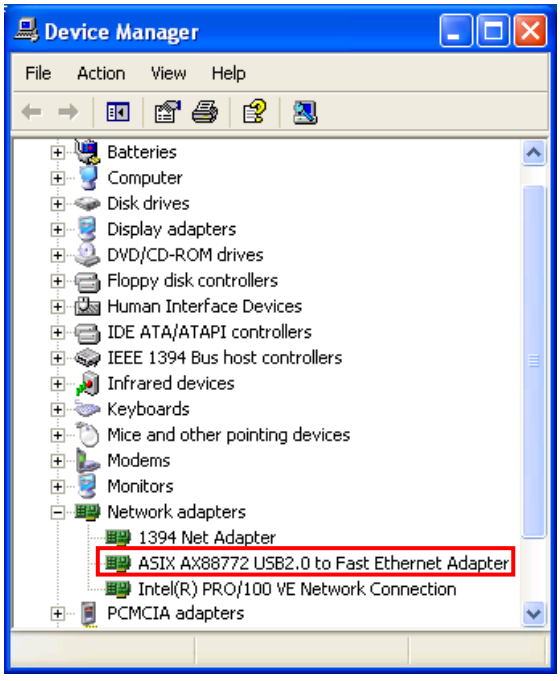
9. When prompted, click **Yes** to restart your computer.

System Settings Change
To finish setting up your new hardware, you must restart your computer.
Do you want to restart your computer now?
Yes
No

# Verifying the Driver Installation in Windows

To verify your Ethernet adapter installation, select **Control Panel** > **System** > (**Hardware**) > **Device Manager**. In the **Network adapters** group, **ASIX AX88772 USB2.0 to Fast Ethernet Adapter** should be displayed.

If there is a question or exclamation mark next to that item, then the driver is not properly installed. Please delete the item and repeat the installation steps.

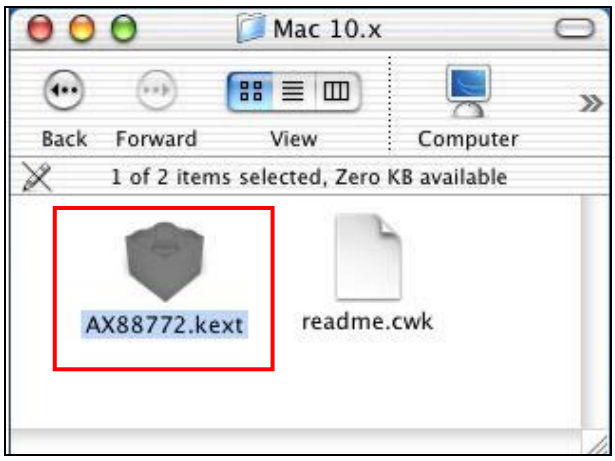



*The example screenshot is under Windows XP.

# MAC OS X 10.x

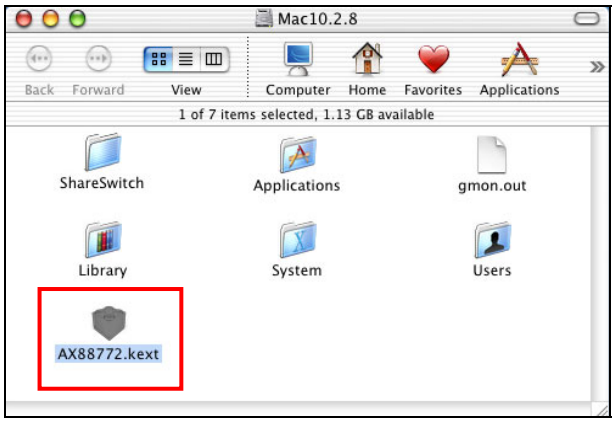
1. Insert the provided driver CD into your CD-ROM drive. Double-click the CD and navigate to the directory of **/Driver/Mac10.x**.

2. In the directory of **Mac10.x**, select and copy the folder named **AX88772.kext**.




3. On the desktop, double-click the start-up drive.

4. Paste the **AX88772.kext** to the root directory of the disk.

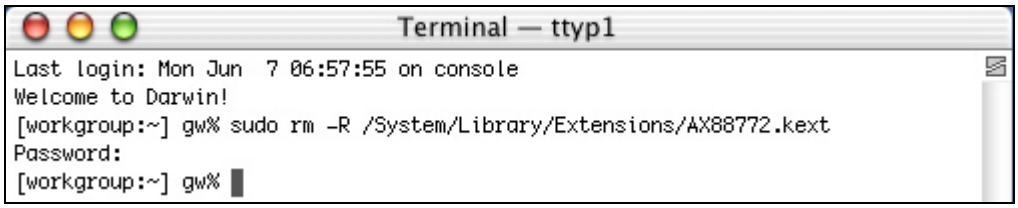


5. Open the terminal application by clicking **Go** > **Application** > **Utilities** > **Terminal**.

6. If there is one old driver in the **Extensions** directory, please remove it first by executing the command:

```
sudo rm -R /System/Library/Extensions/AX88772.kext
```

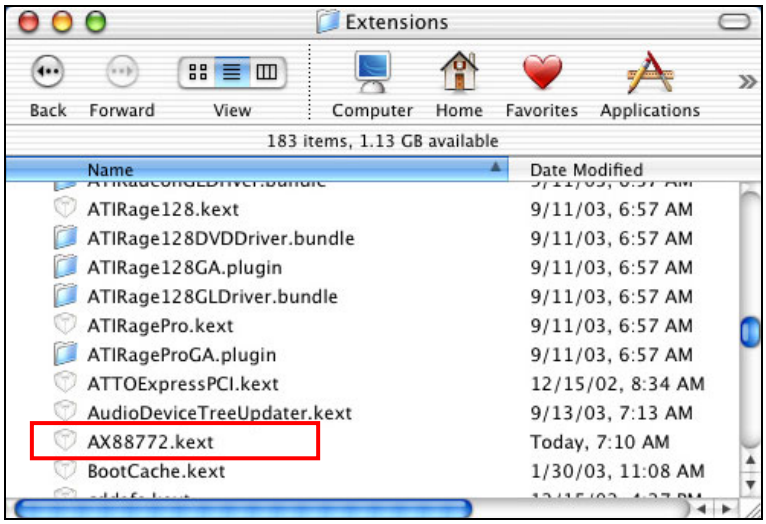
You will need to enter your password as prompted.



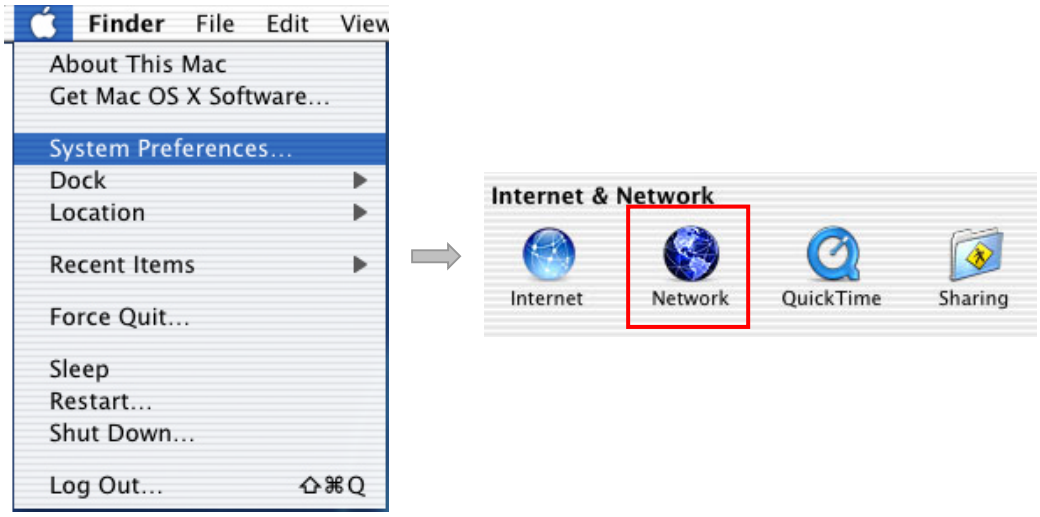

7. Paste the driver to the **Extensions** folder by the command line below:

```
sudo cp -R //AX88772.kext /System/Library/Extensions/AX88772.kext
```

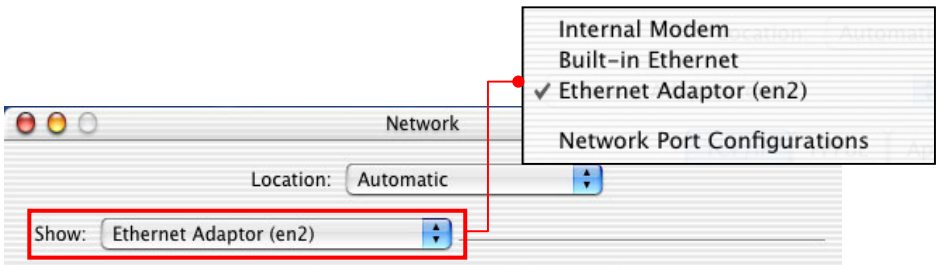
To verify the installation, you can go to **/System/Library/Extensions** to check if **AX88772.kext** is present.




8. Connect the Ethernet adapter to a free USB port.
9. Reboot your Mac.
10. Start **System Preferences** and select **Network**.

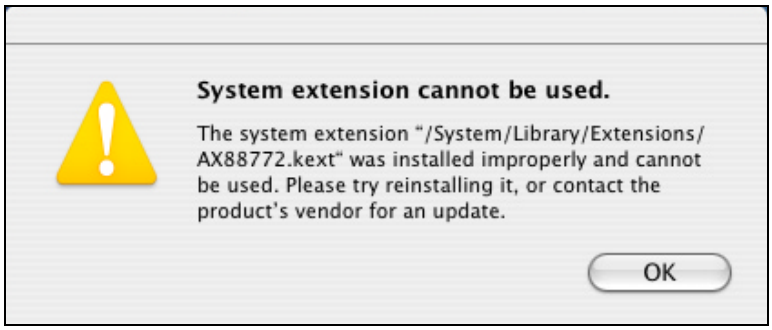



11. You will find that a new Ethernet network interface is available. It's usually named **Ethernet Adapter (en1)** or **Ethernet Adapter (en2)**.




Now you are ready to configure the network settings for network access.

You must use the command line to install the driver as instructed above. Simply copy and paste **AX88772.kext** to the **Extensions** folder will lead to an improper installation as the warning message below:


System extension cannot be used.
The system extension "/System/Library/Extensions/AX88772.kext" was installed improperly and cannot be used. Please try reinstalling it, or contact the product's vendor for an update.
OK

# 3. Regulatory Compliance

## FCC Conditions

This equipment has been tested and found to comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference

(2) This device must accept any interference received. Including interference that may cause undesired operation.

## CE

This equipment is in compliance with the requirements of the following regulations: EN 55 022: CLASS B